Notes on Moreau's Sunbird Nectarinia moreaui

The Cambridge Tanzania Rainforest Survey 1990 visited Mamiwa Kisara Forest Reserve in the Ukaguru Mts (6°21S, 38°47E) from 23 August to 14 September 1990. The team included two ornithologists who conducted understorey mist-netting at three sites, one at 1500 m (the lowest remaining forest) and two at 1800 m. In total 324 birds were caught (Evans & Anderson 1993).

One of the most numerous birds in the forest was Moreau's Sunbird, considered nearthreatened by Collar & Andrew (1988). It is known only from the Ukagurus, the Ngurus and the Uvidundas, above 1300 m (Britton 1980). It forms a superspecies with the Regal Sunbird N. regia, Eastern Double-collared Sunbird N. mediocris and Loveridge's Sunbird N. loveridgei. Moreau's was originally described as a sub-species of N. mediocris and, indeed, may be returned to this status in a current revision of the East African list (N. E. and E. M. Baker, verbally).

New observations

The species was seen and heard daily in the field around both netting sites, typically in the canopy or in bushes along roads through the forest. It was not observed in the extensive mature pine plantations adjoining the forest reserve, nor in non-forest areas (including scrub). It sometimes joined mixed-species flocks. The call/song is typical of sunbirds—a rapid, almost musical, cascade of high-pitched notes.

Thirty-seven were netted, including 20 adult males and 15 adult females. This is a capture rate of 27.6 per 10 000 net-metre hours, the highest for any species in the Ukagurus. Biometrics are summarized in Table 1. Four birds were each recaptured once but none showed any significant movements, weight changes or moult progression. Advanced wing and tail moult was noted on one male and one female. Stuart & van der Willigen (1978) caught six in about 9000 net-metre hours.

n	adult male 20	adult female 15	immatures 2
Wing mm	56 (53-59)	51.5 (50-53)	52 (51, 53)
Tail mm	39.2 (29-43)	34.1 (32-36)	29 (28, 30)
Bill mm	23.7 (19.7-26.4)	22.1 (19.2-24.8)	20.3 (19.9, 21.9)
Tarsus mm	18.0 (17.6-20.0)	17.8 (16.9–19.0)*	17.7 (17.6, 17.8)
Weight g	8.3 (7.6–9.6)	8.1 (6.8–9.1)	7.1 (7.0, 7.2)

Table 1. Biometrics of Moreau's Sunbirds (mean and range)

*excludes one apparently erroneous measurement of 13.8 mm on an otherwise normal bird.

The only other published measurements are from Mackworth-Praed & Grant (1957) who give winglength ranges of 55–57 and 50–54 mm for males and females respectively, agreeing closely with our larger data set.

Five females and none of the males had enlarged and vascularized brood patches indicating that they were incubating eggs. A sixth female was growing fresh feathers on her brood patch and had begun moult, implying recent completion of breeding. Two recently fledged birds were caught on 26 August and 1 September.

Two occupied domed nests were found in low vegetation beside a dirt road through the forest (though one of these was 3 m up, suspended from bracken overhanging a cutting). A third was watched being constructed in a tall tree c. 10 m above the ground by a female on 4 September. She repeatedly visited a nearby insects' nest, of leaves bound with silk, in the branches of a bare tree, to gather silk.

Brown & Britton (1980) list 19 breeding records for *N. mediocris* in northern Tanzania, 14 of them from September to December, but none at all for the rest of Tanzania, nor for *N. moreaui*. Mackworth-Praed & Grant (1957) present breeding records for the two species together, listing July and October through to December for central Tanzania and June to August for Malawi. The high breeding activity we noted in August–September accords with these other records.

Conservation status

The species' abundance suggests that it is in no immediate danger in the Ukagurus, where around 10 000 ha of natural forest remain. However, it is forest-dependent, and the intensive human pressures on Mamiwa Kisara Forest Reserve, which include cutting trees for firewood and clearance for agriculture, may threaten it in the medium term. The status of "near-threatened" is still merited. The Wildlife Conservation Society of Tanzania has initiated a conservation project in the Ukagurus. The current status of forest birds in the Ngurus and Uvidundas is not known.

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